KOMISSAROV, V. A.

KOMISSAROV, V. A. : "An agrobiological study of garlic varities."
Moscow Order of Lenin Agricultural Academy
imeni K. A. Timiryazev. Moscow, 1956.
(DISSERTATION FOR THE DEGREE OF CANDIDATE
IN AGRICULTURAL SCIENCE).

Knizhnaya letopis'
No. 25, 1956. Moscow.

KOMISSAROV, V.A.

Subject   : USSR/Electricity   AID P - 2522

Card 1/1   Pub. 26 - 6/32

Author   : Komissarov, V. A., Eng.

Title   : Utilizing exhaust steam from power plants

Periodical   : Elek sta, 6, 16-19, Je 1955

Abstract   : The need for the growing of fresh vegetables all year
                round on farms and hothouses brought forward the idea
                of heating these installations with waste gases. Study
                on this subject is described in detail, and the
                initial cost of the equipment as well as the prices of
                the vegetables are computed. Three diagrams.

Institution : None

Submitted   : No date

KOMISSAROV, V.A., inshener.

Operation of a low-pressure economizer. Energetik 4 no.10:3-6
O '56.

(Boilers)   (MLRA 9:11)

KOMISSAROV, V.A.

KOMISSAROV, V.A., inzhener.

Using low pressure economizers in electric power plants. Elek.sta.28
no.7:23-28 Jl '57.

(Boilers)   (MLRA 10:9)

KOMISSAROV, V.A., kand.tekhn.nauk

Controlling floating peat at the Novosibirsk Hydroelectric
Power Station. Gidr.stroi. 33 no.4:6-8 Ap '63.   (MIRA 16:4)
     (Novosibirsk Hydroelectric Power Station--Peat)

DUBININ, N.P.; KOMISSAROV, V.A.; Prinimal uchastiye KOGAN, L.B., inzh.

Method of calulating forces needed for opening shells and
extracting metal cores. Lit. proizv. no.1:22-25 Ja '62.
                                                    (MIRA 16:8)
        (Shell molding (Founding)   (Coremaking)

KOMISSAROV, V.A.

Vibration of metal cores during shell casting. Lit. proizv. no.8:
26-28 Ag '62.   (MIRA 15:11)

(Shell molding (Founding))

KOMISSAROV, V.A., aspirant

Power interaction of a casting with metal core. Izv.vys.ucheb.
zav.; mashinostr. no.9:159-166 '62.   (MIRA 16:2)

1. Moskovskoye vyssheye tekhnicheskoye uchilishche imeni
Baumana.
                            (Founding)

KOMISSAROV, V.A.; KOGAN, L.B.; GORBUL'SKIY, G.F.

    Vibratory chill-casting machine. Biul.tekh.-ekon.inform.Gos.
nauch.-issl.inst.nauch.i tekh.inform. no.2:20-21 '63.
                               (MIRA 16:2)
        (Foundries—Equipment and supplies)

DUBININ, N. P.; KOMISSAROV, V. A.

"Balance of forces acting between casting, mould, and cores."

report submitted for 31st Intl Foundry Cong, Amsterdam, 21-25 Sep 64.

DUBININ, N.P.; KOMISSAROV, V.A.

 Crack resistance of grey cast iron castings. Lit. proizv. 5:
 32-33 My '64.
                  (MIRA 18:3)

KOMISSAROV, V.A.

Use of large metallic cores for iron casting into chills.
Lit. proizv. no.3:4-5 Mr '65.

(MIRA 18:6)

KOMISSAROV, V.A., kand. sel'skokhoz. nauk

Evolution of the cultivated garlic A. sativum L. Izv. TSKHA no.4:
70-73 '64.   (MIRA 17:11)

1. Kafedra ovoshchevodstva Sel'skokhozyaystvennoy akademii imeni
Timiryazeva.

DUBININ, N.P., doktor tekhn.nauk,prof.; KOMISSAROV, V.A., inzh.;
    VYAZOV, A.F., inzh.

New technological experiment for the development of chill casting
with the use of metal cores. Izv.vys.ucheb. zav.;mashinostr. no. 12:
203-209 '63.   (MIRA 17:9)

1. Moskovskoye vyssheye tekhnicheskoye uchilishche iemni Baumana.

AYZENBERG, Yu.B.; GORBACHEV, N.V.; GOREV, Z.M.; DEMCHEV, V.I.;
        YEFIMKINA, V.F.; IVANOVA, N.S.; KOMISSAROV, V.D.; MARKIZOVA, G.B.;
        MESHKOV, V.V.; OSTROVSKII, M.A.; RATNER, Ye.S.; SHEFTEL', Ye.B.;
        YUROV, S.G.

        Nikolai Nikolaevich Ermolinskii; obituary. Svetotekhnika 8
        no.12:28 D '62.   (MIRA 16:1)
                (Ermolinskii, Nikolai Nikolaevich, 1894-1962)

KOMISSAROV, V.F.

Clamp for splicing aluminum-steel contact wires. Rats. predl.
na gor. elektrotransp. no.9:68 '64.

Streetcar and trolleybus contact wire crossing at a 30° angle.
Ibid.:70   (MIRA 18:2)

1. Tramvayno-trolleybusnoye upravleniye Chelyabinska.

Kommissarov, V.I.

KOMMISSAROV, V.I.

Sverlovshchik; posobie novomu rabochemu. Rekomendovano dlia primeneniia pri podgotovke rabochikh na zavodakh aviatsionnoi promyshl. Moskva, Oborongiz, 1944, 73 p.,illus. (Bibliotechka novogo rabochego aviatsionnoi promyshlennosti)

Title tr.: The borer; a handbook for the new worker, recommended for the training of workers in the aircraft industry.

TJ1260.K6 1944

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress, 1955

KOMMISSAROV, V. I.

Obshchii kurs slesarnogo dela. Izd 2., dopoln. Odobreno v kachestve uchebnika dlia remesl. uchilishch. Moskva, Uchpedgiz, 1949. 303 p. illus.

General course in assembling and fitting work.

DLC: TJ1165.K6 1949

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953.

KOMMISSAROV, V. I. and M. S. LEBEDEV

Sverlovshchik. Odobreno v kachestve uchebn. posobiia dlia shkol FZO. Moskva, Trudrezervizdat, 1950. 78(i.e.178) p. illus.
Enlarged ed. of V. I. Kommissarov's book published in 1944 under the same title.

Drill operator

DLC: TJ1260.K6   1950

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953.

KOMISAROV, V. I.

Komisarov, V. I. - Obsht kurs po shlosersko delo. Preveli ot 2. dop. izd. Ivan Zheliazkov. Sofiya, Nauka i izkustvo (1951) 279 p. (Mechanical work; a general course. Tr. from the Russian. Illus.)

SO: Monthly List of East European Accessions, Library of Congress, Vol. 2, No. 9, Oct. 1953, Uncl.

KOMISSAROV, V. I.

"General Course of Locksmith's Trade" written by V. I. KOmissarov and published in Moscow 1953 as a Trade School textbook by the All Union Pedagogical Publishing House. The following is a translation of the Table of Contents:

1/2

"General Course of Locksmith's Trade"

Summary: All fundamental knowledge of locksmith trade for a first year course in
          Trade Schools

Complete book available

D 29545

KOMISSAROV, V.I.

[General course for mechanics] Obshchii kurs slesarnogo dela.
Izd.3., perer.i dop. Moskva, Trudrezervizdat, 1953. 351 p.
(MLRA 7:3)
(Machine-shop practice)

KOMMISSAROV, V. I.

344 Obshchiy Kurs Slesornogo Dela.(Uchebnik Dlya Remesl. Uchkishch). Tallin,
Estgosizdat. 1954. 351s. s Ill. 23sm. 5.000 Ekz. 7r. 95k. V Per.--Na Eston. Yaz--
(54-54492)
                                                    621.9s

30: Knizhnaya, Letopis, Vol. 1, 1955

KOMMISSAROV, V. I.

N/5
741.411
.14

Metallbohren, Von M. S. Lebedev Und V. I. Kommissarov. Leipzig, Fachbuchverlag, 1955.

175 P. Illus., Diagrs., Tables.

Translation from the Russian: "Sverlovshchik", Moscow, 1950.

L. KOMISSAROV, V.

2. USSR (600)

4. Drilling and Boring

7. Precision in speed boring with portable machines. Mer. flot 13 No. 3, 1953.

9. **Monthly List of Russian Accessions**, Library of Congress, ____June____1953. Unclassified.

KOMISSAROV, V., kandidat tekhnicheskikh nauk.

High-speed boring of cylinders with thermocorundum cutters. Mor.i rech.
flot 13 no.8:31-32 D '5?.   (MLRA 6:12)
              (Drilling and boring) (Cylinders)

Kom MISSAREV VASILIY IVANOVICH

KOMMISSAROV, Vasiliy Ivanovich; RZHAVINSKIY, V.V, redaktor;
KOPTEVSKIY, D.Ya., redaktor; EGGERT, A.P., tekhnicheskiy redaktor.

[General course in machine-shop practice] Obshchii kurs
slesarnogo dela. Izd. 4-oe, ispr. i dop. Moskva, Vses.
uchebno-pedagog. izd-vo trudrezervizdat, 1955. 371 p.
(Machine-shop practice)   (MLRA 9:1)

Translation from: Referativnyy zhurnal, Mashinostroyeniye, 1959, No. 6, pp. 80-81,
20677

AUTHOR: Komissarov, V. I.

TITLE: Calculation of the Wear of Carbide and Ceramic Cutting Tools for
           Cutting Steel and Cast Iron   14

PERIODICAL: Tr. Dal'nevost. politekhn. in-ta, 1957, Vol. 46, No. 16, pp. 1-15

TEXT: Calculations are presented of the wear of carbide and ceramic cutting
tools in direction normal to the treated surface, when cutting steel and cast
iron. It is pointed out that it is necessary, for determining the wear, to
dispose of data on the magnitudes of the relative wear u_0, i. e., the wear on
1,000-m way of cutting and the coefficient K, characterizing the ratio of the
initial wear to the relative one. Investigations are described of the influence
of the cut condition elements (v, t, and s) and the geometry of the tool on the
magnitude of relative wear. The quantities u_0 and K were calculated from the
results of tool wear measurements depending on the way 1 of cutting cast iron

Card 1/2

Calculation of the Wear of Carbide and Ceramic Cutting Tools for Cutting Steel
and Cast Iron

H_B 160 with BK6 (VK6) tools. The functional dependence of u_0 on the factors
under investigation is presented. The coefficient K is determined through the
relative wear u_0. From the data u_0 and K the wear is determined. The calcula-
tion of wear of a cutting tool in grinding various steels is exemplified. It is
shown that it is possible to determine, on the basis of preliminary calculations
of the tool wear, the cut conditions and the tool geometry, which assure the
maximum productivity with the simultaneous maintaining of the prescribed precision
in processing the parts. There are 5 figures and 4 tables.

                                        B. L. D.

Translator's note: This is the full translation of the original Russian abstract.

Card 2/2

KOMISSAROV, Vasiliy Ivanovich; TIKHONOV, V.I., nauchnyy red.; LUKASHUK,
V.A., red.; PERSON, M.H., tekhn.red.

[General course in machine-shop practice] Obshchii kurs slesarnogo
dela. Izd.5., ispr. i dop. Moskva, Vses. uchebno-pedagog.izd-vo
Trudreservizdat, 1958. 389 p.   (MIRA 12:3)
                    (Machine-shop practice)

KOMISSAROV, V.I., kand.tekhn.nauk, dots.;PODSUSHNYY, A.M., red.

[Errors in adjustment and their effect on the accuracy of the
reciprocal location of coaxial and conjugated holes in machining
body parts on boring machines] Pogreshnosti ustanovki i ikh vliianie
na tochnost' vzaimnogo raspolozheniia soosnykh i sopriazhennykh
otverstii pri obrabotke korpusnykh detalei na rastochnykh stankakh.
Vladivostok, 1959. 13 p. (Vladivostok. Dal'ne-vostochnyi politekh-
nicheskii institut. Trudy, vol.52, no.5)
    (Machine-shop practice)   (Drilling and boring)   (MIRA 14:4)

KOMISSAROV, V.I., kand.tekhn.nauk

Portable machine tool for high speed boring of marine engine
cylinders. Sudostroenie 25 no.1:61-63 N '59. (MIRA 13:4)
(Marine engineering) (Drilling and boring machinery)

KOMISSAROV, V.I., kand.tekhn.nauk; LEONT'YEV, V.I., inzh.

Giving a finish to marine engine cylinders by means of high
speed boring and reeling. Sudostroenie no.7:52-54 Jl '60.
(MIRA 13:7)

(Marine engines) (Surfaces (Technology))

S/145/60/000/012/006/008
D221/D301

AUTHORS: Komissarov, V. I., Candidate of Technical Sciences, and Gladkikh, L. G., Assistent

TITLE: Investigation and calculation of errors due to tempe- rature deformations of machined components during cutting

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Mashinostro- yeniye, no. 12, 1960, 143-150

TEXT: The author gives the results of experimental investigations on longitudinal and transverse distribution of cutting heat; the effect of machining conditions and tool geometry on the heat quan- tity, thermal deformations in the component and their relationship to the main factors. The experiments were carried out with C421-4V (SCh-21-40) cast iron bushes of 560 mm OD, whose inside diameter was varied from 450 to 500 mm. Their length was 800 mm and weight 515 - 315 kg. Carbide tipped tools BK8 (VK8) were used, whose geo- metry is described. The temperature was measured by a mercury

Card 1/3

Investigation and calculation ...   S/145/60/000/012/006/008
D221/D301

thermometer fixed in blind holes drilled in the machined surface (up to 48 thermometers were used). Immediately after the machining, a yoke with three micron indicators was placed at the end section to determine the deformations. In both transversal and longitudinal sections the distribution of heat is not uniform; in the former, maximum temperature is found at points where a considerable quanti- ty of hot chips is accumulated during machining. The average tempe- rature of components where the chips contributed to heat generation was 20 - 25% higher than in cases which chip removal during the machining. Formulae for errors in machining due to non-uniform heating are given. Effects of the cutting regime, speed and depth are also considered. The authors deduce that the thermal deforma- tions in microns are equal to $0.31 \cdot 10^{-4} D^2 l / G s^{1.2} v 0.05$, where s = the feed in mm/turn; v = the speed of cutting in m/min; D = the diameter of the machined hole in mm; l=the length of machined hole in mm; G = the weight of component in kg. There is a good agreement between the calculated values of thermal deformations and experi- mental results. The amount of heat due to machining which enters

Card 2/3

KOMISSAROV, V.I., kand.tekhn.nauk, dotsent

Calculating the dimensional wear of cutting tools. Vest.mash. 40
no.11:63-66 N '60.

. (Metal-cutting tools)   (MIRA 13:10)

KOMISSAROV, V.I.

"Investigating the Machineability of Zinc Alloy (The investigation enabled
to increase the rate of machining by 3-5 times)."

report presented at the 13th Scientific Technical Conference of the Kuybyshev
Aviation Institute, March 1959.

S/123/61/000/003/004/023
A004/A104

AUTHORS: Kazarin, A. S., and Komissarov, V. I.

TITLE: The machinability of the ЦАМ-4-1 (TsAM-4-1) zinc alloy during
             longitudinal face end turning and boring

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 3, 1961, 23, abstract
             3B207. ("Tr. Kuybyshevsk. aviats. in-t", v. 9, 1959, 105-117).

TEXT: Investigations showed that the TsAM-4-1 alloy distinguishes itself
by its good machinability during turning and boring with ВК8 (VK8) sintered
carbide cutters. The recommended speed range during external turning is 500-700
m/min. A reduction of the cutting speed is caused by the tool wear owing to the
presence of slag and oxide impurities in the alloy. There are 10 figures and
1 table.

                                                    E. Dyumova

[Abstractor's note: Complete translation]

Card 1/1

S/122/61/000/002/008/011
A161/A126

AUTHORS: Mitryayev, K. F., Candidate of Technical Sciences, Komissarov,
             V. I., Engineer

TITLE: End milling of EI643 high-strength steel

PERIODICAL: Vestnik mashinostroyeniya, no. 2, 1961, 55 - 58

TEXT: The article presents the results of an experimental investigation
of the machinability of ЭИ643 (EI643) steel carried out by the authors under
supervision of Professor Doctor of Technical Sciences N. I. Reznikov. EI643 steel
is a special grade used for critical power machine parts. [Abstracter's note: The
steel composition is not given]. Its properties make this steel difficult to cut,
and particularly by end milling. Experimental milling has been done on an "ЭрвАГ"
("Ervag") horizontal milling machine, with a standard (ГОСТ 8529-57/GOST 8529-57)
end mill 130 mm in diameter, with one or two blades tipped with Т15К6 (T15K6) and
Т30К4 (T30K4) alloy, without coolant. T15K6 alloy tips proved to be better; they
withstood about 100 min. cutting, compared to only 30 min with T30K4 tips. There
are 7 figures, 1 table and 2 Soviet-bloc references.

Card 1/1

S/122/62/000/009/003/003
A006/A101

AUTHORS: Komissarov, V. I., Engineer, Mitryayev, K.F., Candidate of Technical
             Sciences

TITLE: Butt-milling of titanium alloys

PERIODICAL: Vestnik mashinostroyeniya, no. 9, 1962, 68 - 70

TEXT: Information is given on results of investigatin the suitability of
BT 6 (VT6) and OT4 (OT4) titanium alloys for butt milling. The investigation was
carried out under the supervision of Professor N. I. Reznikov, Doctor of Technical
Sciences at the cutting laboratory of the Kuybyshevskiy aviatsionnyy institut
(Kuybyshev Aviation Institute). The tests were made on a horizontal "Ervag" milling
machine. A 130 mm diameter cutter was used with blades having sintered carbide or
high speed steel plates. The most suitable alloy for the blades was determined by
asymmetrical milling of VT6 alloy; the cutter was adjusted in respect to the work
piece by a displacement $k = 6$ mm $\left(\frac{k}{D} = 0.045\right)$. The tests show that butt milling of
titanium alloys VT6 and OT4 with sintered carbides is more efficient than milling
with high-speed steel blades (P9 K5 (R9K5) and P9 K10 (R9K10)). In this case the

Card 1/2

Butt-milling of titanium alloys   S/122/62/000/009/003/003
                                                    A006/A101

best material is BK6 M (VK6M) sintered carbide. Optimum grinding angles of the
cutter are $\gamma = 5 \div 7°$; λ $5 \div 10°$; $\alpha = 10 \div 15°$. For cutting VT6 and OT4 alloys
with VK6M cutters, the following conditions are recommended: $v = 40 - 60$ m/min.
$s_z = 0.05 - 0.15$ mm/tooth, at a displacement of the mill $\frac{k}{D} = 0.05 \div 0.1$. At the
initial stage of cutting, when the cutter is incised into the work piece, the
cutting speed should be reduced by about twice in comparison to the speed during
the established process. There are 7 figures and 1 table.

Card 2/2

ACCESSION NR: AR301044·2·   S/0276/63/000/008/B107/B107

SOURCE: RZh. Tekhnologiya mashinostroyeniya, Abs. 8B623

AUTHOR: Komissarov, V. I.

TITLE: Investigation of the cutting zone and of the forces at face mills
processing heat-resistant and titanium alloys

CITED SOURCE: Sb. Obrabatyvayemost' zharoprochn. i titanovy#kh splavov.
Kuyby#shev, 1962, 327-344

TOPIC TAGS: cutting, cutting zone, cutting force, heat-resistant material,
titanium alloy

TRANSLATION: The author presents the results of a study of the cutting zone by
observing the root of the cutting and the cutting forces during the face milling
of the heat resistant alloy EI766, steel 1Kh18N9T, titanium alloys VT6 and OT4,
and of steel 45. He describes a device for the instantaneous halting of the
cutting process. He notes that during the processing of titanium alloys an

Card 1/2

ACCESSION NR: AR3010442

elementary chip is, formed with large chipping angles (β_1 = 35-42°) and small longitudinal contractions (K_1 = 1.1-1.3). Such a chip contributes to the breaking off of the cutting edge. A flowing cutting occurs only during slow cutting speeds up to 80 m/min and small groove widths up to 0.08 mm. The magnitude of the forces during the processing of titanium alloys and steel 45 are approximately equal; the largest forces were registered during the milling of EI766 alloy. An angle γ = 45 to 10° is recommended for titanium alloys. A shift of the bar towards the input of the mill increases the radial and axial forces during the processing of the titanium and heat-resistant alloys. The dulling of the mill blades along the rear surfaces causes a sharp increase in the radial and axial force during the cutting of the same alloys. At the same time, the tangential force remains almost unchanged. There are 10 figures, 2 tables, and 4 references. M. Degtyareva.

DATE ACQ: 30Sep63   SUB CODE: IE, MD   ENCL: 00

Card 2/2

MITRYAYEV, K.F., kand.tekhn.nauk; KOMISSAROV, V.I., inzh.

    Investigating cutting temperature conditions in face milling of
heat-resistant and titanium alloys. Izv.vys.ucheb.zav.; mashinostr.
no.6:190-199 '63.   (MIRA 16:10)

    1. Kuybyshevskiy aviatsionnyy institut.

KOMISSAROV, V.I., kand. tekhn. nauk, dotsent

Geometrical precision of horizontal boring machines and its effect
on the precision of hole machining. Trudy DVPI 56 no.1:85-105 '62.
(MIRA 17:6)

KOMISSAROV, V.K., inzh.

The UTB-55 type remote control and signaling device. Trudy VNIIE
no.7:34-55 '58.   (MIRA 16:12)

KOMISSAROV, VIKTOR KONSTANTINOVICH

KAMINSKIY, Yevgeniy Abramovich; KOMISSAROV, Viktor Konstantinovich; ZVENIGORODSKIY, I.S., redaktor; VOLONIN, K.P., tekhnicheskiy redaktor.

[Remote control and remote signaling in power systems] Tele-upravlenie i telesignalizatsiia v energosistemakh. Moskva, Gos.energ.izd-vo] 1955. 255 p.   (MLRA 9:1)
    (Remote control)

25095

S/122/60/000/011/013/020
A161/A127

| .||00

AUTHOR: Komissarov, V. L., Docent, Candidate of Technical Sciences

TITLE: Calculation of the dimensional wear of cutters

PERIODICAL: Vestnik mashinostroyeniya, no. 11, 1960, 63 - 66

TEXT: Efficiency and productivity in mechanical engineering depends a
great deal on the accuracy of mechanical working and machining processes. Accura-
cy of metal-cutting processes is dependent of many factors, above all of the
rigidity of the technological system, the deformation of the cutting tool and
the workpiece by temperature, the wear of the cutting tool etc. The author tries
to develop reliable methods for the calculation of the dimensional wear of cutt-
ing tools on the grounds that inspite of the numerous works on the nature of
tool wear the problem of the values of the relative wear and especially the re-
lations between the relative wear and the factors effecting its numerical value
has been studied insufficiently sofar. Both the front and back edge of a cutter
are subject to wear. In the calculation of the expected accuracy of machining
first of all the dimensional wear u (wear of the cutter in the direction perpen-
dicular to the surface of the workpiece), which directly effects the accuracy of

Card 1/8

23093

Calculation of the dimensional wear of cutters

the shape and the dimensions of the parts being machined, (Figure 1). In a number of cases, e.g., in the machining of large-size shafts or cylinders or when working with adjusted machine tools, the error stemming from the tool wear proves to be the basic and most vital among the whole complex of constituent components of the summarized error. As indicated in Figure 1, three periods of wear have been assumed for the change of geometry of cutters resulting from wear: I = initial period of wear, II = normal period of wear, III = disastrous period of wear, In the normal zone of wear the wear intensity may be considered approximately constant. It may be expressed by the relative wear u_0, i.e., the wear occurring over 1,000 m of cutting path. Therefore, we obtain for

$$u_0 = \frac{1,000 \ u_{norm}}{L} \text{ micron/km} \tag{1}$$

where u_{norm} = normal wear in micron, L = cutting path in m. It is more convenient to express the initial wear u_{in} by the relative wear, i.e.

$$u_{in} = ku_0 \tag{2}$$

Card 2/8

25095

S/122/60/000/011/C13/020
A161/A127

Calculation of the dimensional wear of cutters

where k is a factor characteristic of the relation between the initial and the relative wear. Thus, dimensional wear of the cutting tool can be calculated by the formulas:

$$u = u_{norm} + u_{in}, \text{ or after substitution} \tag{3}$$

$$u = \frac{u_0 L}{1,000} + k u_0 \tag{4}$$

The error Δu caused by the tool wear in turning and boring processes will be equal to the double tool wear value

$$\Delta u = 2 u_0 \left(\frac{L}{1,000} + k \right) \tag{5}$$

The author investigates the effect of cutting conditions and geometric tool shape on the tool wear for turning of cast iron and steel with cutters tipped with different hard alloys and ceramic oxides of the type ЦM-332 (TsM-332). Wear was measured by a micron indicator and a minimeter, and a device installed on the ground surface of the tool holder. Three measurements were made: of the

Card 3/8

25095

Calculation of the dimensional wear of cutters

cold cutter prior to cutting of the hot cutter immediately after retraction from work piece: of the cutter after cooling to room temperature. By the difference between the first and the third measurement the dimensional wear was determined. The height h (Figure 1) was measured at the same time, and the results proved that the expression $u = h \cdot tg\alpha$ which is frequently used in many cases is not true. Mathematical interdependence between the relative wear and the factors causing the same has been determined. The formula for calculation of relative wear is

$$u_0 = C_u v^m s^n t^p \qquad (6)$$

where C_u is an experimentally determined factor characterizing the quality of the workpiece material and cutter material: v,s and t is cutting speed, feed and depth respectively; the grade index (m, n, and p) of these values were found experimentally. The results and data of the experiments are summarized in Table 2. It can be seen that the u_0 value varies widely and can be calculated with sufficient accuracy for any practical case. The derived numerical relations can be used in design calculations of technological processes. For instance boring of large cylinders, usually finish boring is performed at a low cutting speed and

Card 4/8

25095

Calculation of the dimensional wear of cutters   S/122/60/000/011/013/020
                                                        A161/A127

feed, but, however, by calculation of the expected accuracy it is shown that cut-
ting can be sped up considerably. Table 3 shows the calculated expected accuracy
and machining rate, as well as experimental data for boring an C421-41 (SCh 21-41)
cast iron cylinder (HB 180) of 1000 mm length and 500 mm diameter by a cutter
tipped with BK 6(VK6) alloy. Relative wear is calculated with the formula

$$u_0 = 0.198v^{1.02} s^{0.79} t^{0.7};$$

the cutting paty length with

$$L = \frac{\pi D l}{1,000 \ s}$$

and Δ_u (error from dimensional wear of the cutter) using the formula (5). For
convenience the formula (5) and (6) can be presented graphically in a straight-
-line chart. It is stressed that dimensional wear calculations of the cutting
tool are particularly important in automated machining process. Knowing the toler-
ance, the setting dimension and dimension error caused by the dimensional wear of
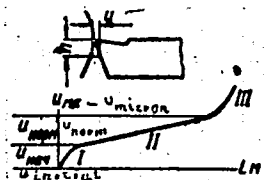the tool after machining of one part, it can be calculated after how many parts

Card 5/8

25045

S/122/60/000/011/013/020
A161/A127

Calculation of the dimensional wear of cutters

the machine needs resetting, or after how many operations the tool needs regrinding. X
There are 4 figures and 4 Soviet-bloc references.

Figure 1:

Card 6/8

ACC NR: AP6011914   SOURCE CODE: UR/0141/66/009/002/0292/0301

AUTHOR: Komissarov, V. M.

ORG: Acoustics Institute AN SSSR (Akusticheskiy institut AN SSSR)

TITLE: Ray statistics in a plane stratified medium with random nonhomogeneities

SOURCE: IVUZ. Radiofizika, v. 9, no. 2, 1966, 292-301

TOPIC TAGS: radio wave propagation, random process, wave equation

ABSTRACT: The process of wave propagation in a medium with regular and random in-
homogeneities in described by the Fokker-Plauk equation. The spatial-angular function
of ray distribution was found. The fluctuations of incidence angles and ray dis-
placements were calculated. The applicability of the considerations given is ex-
plained. The author thanks L. A. Chernov for numerous discussions of this work.
Orig. art. has: 59 formulas. [Based on author's abstract.]   [NT]

SUB CODE: 20/ SUBM DATE: 19Jul65/ ORIG REF: 008/ OTH REF: 001

Card 1/1   UDC: 621.371.134

KOMISSAROV, V.M.

Amplitude and phase fluctuations and their correlation in
the propagation of waves across a medium of random statistically
anisotropic inhomogeneity. Akust. zhur. 10 no.2:174-185 '64.
(MIRA 17:6)

1. Akusticheskiy institut AN SSSR.

KOMISSAROV, V.M., kandidat tekhnicheskikh nauk.

[Technical and economic indices for the construction of multi-
storied apartment buildings in Moscow] Tekhniko-ekonomicheskie
pokazateli po stroitel'stvu mnogoetazhnykh zhilykh domov v Mo-
skve. Moskva, Gos. izd-vo lit-ry po stroitel'stvu i arkhitekture,
1953. 55 p.   (MLRA 7:3)
    (Moscow--Building--Estimates) (Estimates--Building--Moscow)

KOMISSAROV, V.M.

KOMISSAROV, V.M.; kand.tekhn.nauk

Methods for estimating the efficiency of standard plans for farm buildings. Trudy MIEI no.14:167-170 '59.

(MIRA 13:1)

1. Nauchno-issledovatel'skiy institut ekonom'ki stroitel'stva Akademii stroitel'stva i arkhitektury SSSR.
(Farm buildings) (Building--Estimates)

KOMISSAROV, V.N.; BURGANOV, A.D.; KAPLAN, L.A.

Buildup welding of the drum bottoms in riveted steam boilers during major overhaul. Avtom. svar. 16 no.11:86-88 N '63.
(MIRA 17:1)

1. Uralenergoremont.

Komissarov, V.P.

KOMISSAROV, Vasiliy Pavlovich, kandidat ekonomicheskikh nauk; BOLDYREV, B.G.,
kandidat ekonomicheskikh nauk, otvetstvennyy redaktor; FIALKOVA, V.,
redaktor izdatel'stva; LEBEDEV, A., tekhnicheskiy redaktor

[The financial and credit system of Czechoslovakia] Finansovo-kreditnaia
sistema Chekhoslovatskoi Respubliki. Moskva, Gosfinizdat, 1956. 158 p.
(Czechoslovakia--Finance)   (MIRA 9:12)

KOMISSAROV, Vasiliy Pavlovich; POPOV, Andrey Nikolayevich; SITNIN, V.K.,
    red.; BUDARINA, V., red.; KOROLEVA, A., mladshiy red.;
CHEPELEVA, O., tekhn.red.

[Money, credit and finance of the European people's democracies]
Den'gi, kredit i finansy evropeiskikh stran narodnoi demokratii.
Pod red. B.K.Sitnina. Moskva, Izd-vo sotsial'no-ekon.lit-ry,
1960. 237 p.   (MIRA 14:1)
            (Europe, Eastern--Finance)

NIKOL'SKIY, L.N., inzh.; KOMISSAROV, V.T., inzh.; SHIPANOV, L.P., inzh.

New forging rolls with a continuous roll forging process.
[Nauch. trudy] ENIKMASha 11:5-13 '65.   (MIRA 18:6)

KOMISSAROV, Ya. F.

PROCESSES AND PROPERTIES INDEX

β-Chloroethyl esters of sulfurous acid.—Ya. F. Komissarov. *J. Gen. Chem.* (U. S. S. R.) 3, 309–12 (1933).— By the interaction of $SOCl_2$ and an excess of $HOCH_2CH_2Cl$ (I) at an elevated temp. is formed only $OS(OCH_2CH_2Cl)_2$ (II) (Levaillant, C. A. 24, 824). By working in the cold with a small excess of $SOCl_2$ was obtained $OS(Cl)OCH_2CH_2Cl$ (III). III, treated with an excess of I, gave II, which, with an excess of $SOCl_2$, was reconverted into III. III was also obtained from II with PCl_5: II $\cdot$ $PCl_5 = (CH_2Cl)_2 + POCl_3 + III$. $O:NOCH_2CH_2Cl$ (IV) treated with $SOCl_2$ split off 1 or 2 mols. of NOCl, giving II or III, depending on the conditions of the reaction. One mol. (80.5 g.) I was dropped into 125 g. (5% excess over 1 mol.) of $SOCl_2$ in the cold, and the product was then refluxed at 50–60° and 100 mm. pressure until HCl and $SOCl_2$ were expelled, and then fractionated in vacuo, giving 136 g. (83% yield) of III, b₅ 93–5°, b₄ 84–5°, d₄° 1.5010. A mixt. of 70 g. III and 60 g. I was refluxed 3 hrs. at 50–60° until the evolution of HCl had ceased; the product was washed with H_2O, dried with anhyd. Na_2SO_4 and vacuum-distd., giving 73% (65 g.) II, b₅₂ 147–50°, b₄ 117.5–18°; d₄ 1.4255, mol. refr. 41.25 (found), 41.55 (calcd.). A mixt. of 60 g. $SOCl_2$ and 50 g. IV was refluxed 1 hr. at 40–50°, and then vacuum-fractionated, giving 54 g. (74%) III and 14 g. II mixed with some III. A mixt. of 60 g. $SOCl_2$ and 125 g. IV, refluxed 2 hrs. at 70° and treated as above, produced 65 g. of pure II. A mixt. of 30 g. II and 20 g. $SOCl_2$ was allowed to stand overnight at room temp., the excess of $SOCl_2$ was expelled, and the product vacuum-distd., giving 65% III and 11 g. of unreacted II. II (30 g.) in 100 cc. CCl_4 mixed with 35 g. PCl_5 was refluxed 1 hr., the CCl_4 was expelled first in the water bath and then in vacuo at 50°, and the residue fractionated in vacuo, producing 21 g. (90%) III.   Chas. Blanc

A.S.O. I.S.L.A.   METALLURGICAL LITERATURE CLASSIFICATION

KOMISSAROV, Ya. F.

10

Thio ketones of aliphatic series. I. The action of phosphorus pentasulfide on aliphatic ketones. A. E. Kretov and Ya. F. Komissarov. J. Gen. Chem. (U. S. S. R.) 5, 388-91 (1935).—Mixts. of powd. P_2S_5 with Me_2CO, $MeCOEt$, Et_2CO, Pr_2CO and $(Me_3C)_2CO$ in PhMe were refluxed on a water bath for 8 hrs., the reaction mixts. were steam-distd., the solns. of the thio ketones in PhMe were dried with $CaCl_2$, the PhMe distd. off in vacuo and the residues fractionated. Most of the thio ketones were obtained in small yields and impure state, boiling in vacuo within 10°. They are yellow-red liquids somewhat heavier than H_2O, easily sol. in org. solvents. Me_2CS, $MeCSEt$ and Et_2CS are dimers, Pr_2CS a mixt. of a monomer with some dimer and $(Me_3C)_2CS$ a monomer. $(Me_2CS)_2$, b. 182-5°. $(MeCSEt)_2$, b_{12} 12)-30°, mol. wt. 167 (found), 176 (calcd.), gives $(MeCSEt)_2.HgCl_2$. $(Et_2CS)_2$, b. 135-50°, mol. wt. 210 (found), 204 (calcd.), gives the $HgCl_2$ compd. Pr_2CS, b_{40} 135-50° (slight decompn.), mol. wt. 169 and 173 (found), 130 (calcd.). $(Me_3C)_2CS$, b_{12} 105-10°, gives the $HgCl_2$ compd.   C. R.

METALLURGICAL LITERATURE CLASSIFICATION

CA KOMISSAROV

10

Esters of alkanearsonic acids. Ya. P. Komissarov, A. Ya. Makeeva, and A. S. Swokosoimov. Compt. rend. acad. sci. U.R.S.S. 55, 719-22(1947)(in French); cf. Michaelis, Ann. 320, 253(1902).—Esters of alkane-arsonic acids, RAsO(OR'), (I), were obtained by oxidation of esters of arsonous acids, RAs(OR'), (II), which were obtained by treating the corresponding alkyldichloro-arsines. RAsCl, with the corresponding Na alcoholate in soln. in the corresponding alc. Since II are easily decompd. by water, their oxidation had to be carried out under anhyd. conditions and therefore SeO₂ was used for the oxidation which was carried out in some cases without isolation of II from the excess alc. In another method, the I was obtained by refluxing a mixt. of the Ag salt of the requisite acid with the corresponding alkyl iodide in CₑH₆ or PhMe, filtering the AgI, and distg. in vacuo. The alkyl bromides react much more slowly. A purer product is obtained by the 2nd procedure. II (R, R' given): Me, Me, b. 108-10°, d₄¹⁸ 1.322; Et, Me, b. 133-3°, d₄¹⁸ 1.280; Me, Et (III) b. 136-7°, d₄¹⁸ 1.304; Et,

Et (IV), b. 150-60°, d₄¹⁸ 1.198, Et, Pr, b₆ 181°, d₄¹⁸ 1.108. I: Me, Me, b₆ 97°, d₄¹⁸ 1.502, n 1.409 (53% yield based on MeAsO(OAg), (V)]; Et, Me, b₆ 107-9°, d₄¹⁸ 1.432, n 1.457 (44% yield based on EtAsCl₂); Me, Et, b₆ 122-4°, d₄¹⁸ 1.354, n 1.458 (70-5% yield based on III); Et, Et, b₆ 123-5°, d₄¹⁸ 1.297, n 1.451 (70% yield based on IV); Me, Pr, b₆ 139-40°, d₄¹⁸ 1.243, n 1.451 (40% yield based on V).

W. S. Port

MATERIALS INDEX

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

KOMISSAROV, Yu. F., SOROKOUMOV, A. S., and MALEYEVA, A. Ye.

"New Type of Isomeric Transformations in the Series of Ethers of Alkyl Arsenic Acid,"
Dok. AN, 56, No. 1, 1947

KOMISSAROV, Ye.; SOLOV'YEV, S.

How our montages were made. Sov. foto 18 no.5:28-29 My '58.

(Photography, Trick)   (MIRA 11:5)

BABKIN, N. (Moskva); SYTNIK, M. (Kiyev); KOMISSAROV, Yu. (g.Kaliningrad obl.)

    Repaired by radio amateurs. Radio no.12:33 D '62.   (MIRA 16:3)
     (Television—Maintenance and repair) (Radio—Maintenance and repair)

YERMAKOV, V.S.; SPIRIN, S.A.; CHIZHOV, D.G.; UGORETS, I.I.; LAVRENENKO, K.D.;
    SMIRNOV, G.V.; CHUPRAKOV, N.M.; MKHITARYAN, S.G.; ASMOLOV, G.L.;
    KOTILEVSKIY, A.M.; KOLOKANOV, S.I.; SYROMYATNIKOV, I.A.; FAYERMAN, S.Ts.;
    SOKOLOV, B.M.; KOMISSAROV, Yu.P.; MALYUTIN, I.P.; POBEGAYLO, K.M.;
    MORYAKOV, A.V.; RELAMED, M.N.; KUMSIASHVILI, P.G.; GARKAVAYA, L.A.;
    LIVSHITS, E.M.; NEKRASOV, A.M.

Moisei Vul'fovich Safro; obituary. Elek.sta. 24 no.11:60 N '53.
                                                        (MLRA 6:11)
            (Safro, Moisei Vul'fovich, ?-1953)

KOMISSAROV, Yu.S. (Tula)

Test pumping in boring wells with the AVB-3-100 unit. Vod.i san.
tekh. no.1:38-39 Ja '60.   (MIRA 13:4)
          (Boring) (Water-supply engineering)

KOMISSAROVA, Aleksandra Fedotovna, svinarka; KURLYANDSKAYA, S.V., red.;
AVDEYEVA, V.A., tekhn.red.

[Meeting obligations is a great honor] Vypolnenie obiazatel'stv -
velikaia chest'. Moskva, Izd-vo "Sovetskaia Rossiia," 1960.
43 p.   (MIRA 14:4)

1. Sovkhoz "Pan'kovskiy" Novo-Dereven'kovskogo rayona Orlovskoy
oblasti (for Komissarova).
                        (Swine)

KOMISSAROVA, A.N., metodist; BYKOVA, A.F., metodist po pchelovodstvu;
     GAVRILOVA, V.Ye.; MININA, I.S.; CHERNOVA, I.D., metodist; BLIDMAN, A.O.

     Exhibition of special items. Inform.biul.VDNKH no.5:23-31 My '64.
                                                    (MIRA 18:5)
     1. Pavil'on "Kartofel' i ovoshchi" na Vystavke dostizheniy
     narodnogo khozyaystva SSSR (for Komissarova). 2. Glavnyy
     metodist pavil'ona "Ptitsevodstvo" na Vystavke dostizheniy
     narodnogo khozyaystva SSSR (for Gavrilova). 3. Glavnyy
     zootekhnik pavil'ona "Krolikovodstvo" na Vystavke dostizheniy
     narodnogo khozyaystva SSSR (for Minina). 4. Pavil'on "Mekhani-
     zatsiya i elektrifikatsiya sel'skogo khozyaystva" na Vystavke
     dostizheniy narodnogo khozyaystva SSSR (for Chernova). 5. Glavnyy
     metodist i pavil'ona "Khraneniye i pererabotka zerna" na Vystavke
     dostizheniy narodnogo khozyaystva SSSR (for Blidman).

KOMISSAROVA, A.N.

Innovations in the storage, processing and transportation of vegetables and potatoes. Inform. biul. VDNKH no.8:20-21 Ag '63.
(MIRA 17:8)

1. Glavnyy metodist pavil'ona "Kartofel' i ovoshchi" na Vystavke dostizheniy narodnogo khozyaystva SSSR.

KOMISSAROVA, A.N., metodist

Exhibition and display of special items. Inform. biul. VDNKH
no.2:30-31 F '64.   (MIRA 17:8)

1. Pavil'on "Kartofel' i ovoshchi" na Vystavke dostizheniy
narodnogo khozyaystva.

L 36459-66   EWT(1)/EWT(m)   IJP(c)

AUTHOR: Komissarova, B. A.; Sorokin, A. A.; Shpinel', V. S.

ORG: Institute of Nuclear Physics, Moscow State University (Institut yadernoy fiziki Moskovskogo gosudarstvennogo universiteta)

TITLE: Quadrupole interaction and anisotropy of the Mossbauer effect as deduced from observations of resonance scattering of γ quanta on polycrystals

ABSTRACT: The magnitude of quadrupole interaction of Sn^{119} nuclei in the lattice of white tin has been determined by studying the attenuation of the angular distribution of Mossbauer scattering. The values obtained are $E_Q/\Gamma = 0.59 \pm 0.20$, $\Delta = 0.18 \pm 0.6$ mm/sec at 300K and $E_Q/\Gamma = 0.82 \pm 0.15$, $\Delta = 0.25 \pm 0.05$ mm/sec at 80K, where Γ is the width of the nuclear level and Δ is the hyperfin

Card 1/2

L 36459-66

splitting. The effect of anisotropy of the Mossbauer effect in crystals on the angular distributions of resonance scattering during excitation of individual components of the allowed quadrupole doublet has been theoretically examined. It has been shown that it is possible to determine both the value and the sign of the anisotropy effect and the sign of the quadrupole interaction from angular distribution functions, even when the measurements are carried out on poylcrystalline samples. The effect of anisotropy of the Mossbauer effect has been experimentally detected in measurements of the angular distributions for the quadrupole doublet components in the $(C_4H_9)_2SnO$ compound. The authors thank L. D. Blokhintsev and N. N. Delyagin for their discussions and valuable advice, K. P. Mitrofanov and A. N. Karasev for their assistance in measurements of the absorption spectrum and A. S. Mogilev for developing a system of a shifting source. Orig. art. has: 1 figure, 17 formulas, and 2 tables. [Based on authors' abstract]   [NT]

Card 2/2

KOMISSAROVA E.S.

11H

Action of Magnolia fuscata alkaloids on the cardio-vascular system. E. S. Komissarova (Moscow Med. Inst., Order of Lenin). Farmakol. i Toksikol. 8, No. 1, 17-21(1945).—The mixed alkaloids (I) of dark magnolia (M. fuscata) were compared with magnolamine (II) as to cardiovascular effects in frog and rabbit hearts, isolated and in situ. At 0.1-2 p.p.m. I and II have no significant effect. At 5-10 p.p.m. I has a pos. inotropic and a less pronounced neg. chronotropic effect. At 50-1000 p.p.m. I is a cardiac depressant; so is II at 10-500 p.p.m. Cardiac rhythm is accelerated by I, retarded by II. Arterioles are dilated by II, but I and II are constrictors for peripheral and nephritic veins and capillaries. The depressor effect of II may be due either to vasodilation or to cardiac depression. Differences between I and II indicate that I contains an alkaloid (magnoline?) with higher activity as a cardiovascular stimulant. Julian F. Smith

KOMISSAROVA, F.

We want to do more. Okhr. truda i sots. strakh. 5 no.5:20
My '62.   (MIRA 15:5)

1. Predsedatel' obshchestvennogo soveta pri rayonnoy
bol'nitse, g. Petushki, Vladimirskoy oblasti.
        (Petushki (Vladimir Province)--Public health)

KUTEPOVA, A.I.; GUR'YANOVA, Ye.N.; MAL'TSEVA, R.P.; GRISHKO, N.I.;
KOMISSAROVA, G.I.; TSAREVA, V.N.

Diesters of isophthalic acid as plasticizers. Plast. massy
no.2:52-56 '64.   (MIRA 17:8)

L 32997-65 EPF(c)/EPR/EWP(j)/EWT(m) Pc-4/Pr-4/Pt-4 JAJ/RM/WW

ACCESSION NR: AP5007418   6/0286/65/000/004/0059/0059

AUTHOR: Grishko, N. I.; Mal'tseva, R. P.; Gil's, S. S.; Kutsenko, A. I.; Kutepova, A. I.; Komissarova, G. I.; Shtekker, O. A.

TITLE: A method for producing plasticizers for polyvinylchloride. Class 39, No. 168424

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 4, 1965, 59

TOPIC TAGS: polyvinylchloride, plasticizer

ABSTRACT: This Author's Certificate introduces a method for producing plasticizers for polyvinylchloride. The plasticizers are based on aromatic carboxylic acids and monohydric aliphatic alcohols. A wider selection of raw materials is provided by using the products of oxidation of an industrial blend of xylenes which is poor in n-xylene. The Author's Certificate also covers a modification of this method in which an industrial blend of xylenes is used which is poor in o- and n-xylenes.

ASSOCIATION: none

Card 1/2

KIL'CHEVSKIY, N.A. [Kil'chevs'kyi, M.O.] (Kiyev); KOMISSAROVA, G.L.
[Komisarova, H.L.] (Kiyev); TKACHUK, G.I. [Tkachuk, H.I.]

Longtidinal vibrations of systems consisting of similar elements.
Prykl.mekh. 7 no.6:609-615 '61.   (MIRA 14:11)

1. Institut mekhaniki AN USSR.
                    (Elastic solids--Vibration)

S/879/62/000/000/057/088
D234/D308

AUTHOR: Komissarova, G. L. (Kiev)

TITLE: Stability of a cylindrical shell with a longitudinal cor-
rugation in the presence of longitudinal compression

SOURCE: Teoriya plastin i obolochek; trudy II Vsesoyuznoy konfe-
rentsii, L'vov, 15-21 sentyabrya 1961 g. Kiev, Izd-vo
AN USSR, 1962, 339-343

TEXT: The purpose of the paper was to find methods of design of
corrugated shells and to solve the problem of an optimum shell in
the first approximation. A complete solution was not found. Using
the notion of an equivalent circular shell it is established that
the longitudinal corrugation increases the critical stress by k_1
times, k_1 being a factor calculated from the condition of minimum
square deviation of potential energy. The problem of stability of
a corrugated shell reduces to that of the equivalent circular shell.
The most economical corrugation is that obtained by mirror reflec-
tion or arcs of the circle with respect to an inscribed regular

Card 1/2

Stability of a ...

S/879/62/000/000/057/088
D234/D308

polygon (see Fig. 3). Examples of design are given. Experiments confirmed the above results: for instance, square corrugation increased the critical stress by 2 times, theoretical factor of increase being 2.08. There are 3 figures and 1 table.

Fig. 3

Card 2/2

KOMISSAROVA, G.L. [Komisarova, H.L.] (Kiyev)

Lengthwise corrugated cylindrical shells with an optimum shape.
Prykl.mekh. 9 no.5:473-479 '63.   (MIRA 16:10)

1. Institut mekhaniki AN UkrSSR.

ACCESSION NR: AT4039435   S/2879/64/000/000/0563/0571

AUTHOR: Komissarova, G. L. (Kiev)

TITLE: Stability of a longitudinally corrugated cylindrical shell, unsupported and supported by ribs

SOURCE: Vsesoyuznaya konferentsiya po teorii obolochek i plastin. 4th, Yerevan, 1962. Teoriya obolochek i plastin (Theory of plates and films); trudy* konferentsii, 1964, 563-571

TOPIC TAGS: shell, cylindrical shell, corrugated cylindrical shell, rib supported shell, shell stability, axial compression

ABSTRACT: The author notes that methods for the calculation of corrugated elements have not yet been sufficiently developed, despite the ever wider use of these elements in instrument building, shipbuilding and aircraft construction. This is particularly true of corrugated cylinders, since the problem of the calculation of corrugated plates has been fundamentally solved. When testing longitudinally corrugated cylindrical shells for axial compression, several forms of stability loss can be observed, with the form of the loss depending primarily on the aspect and size of the corrugation; i.e., on the increase in flexural strength and the axial direction of the corrugated shell in comparison with a smooth shell. As a parameter to characterize the increase in flexural strength of corrugated shells

Card 1/5

ACCESSION NR: AT4039435   S/2879/64/000/000/0563/0571

AUTHOR: Komissarova, G. L. (Kiev)

TITLE: Stability of a longitudinally corrugated cylindrical shell, unsupported and supported by ribs

SOURCE: Vsesoyuznaya konferentsiya po teorii obolochek i plastin. 4th, Yerevan, 1962. Teoriya obolochek i plastin (Theory of plates and films); trudy* konferentsii, 1964, 563-571

TOPIC TAGS: shell, cylindrical shell, corrugated cylindrical shell, rib supported shell, shell stability, axial compression

ABSTRACT: The author notes that methods for the calculation of corrugated elements have not yet been sufficiently developed, despite the ever wider use of these elements in instrument building, shipbuilding and aircraft construction. This is particularly true of corrugated cylinders, since the problem of the calculation of corrugated plates has been fundamentally solved. When testing longitudinally corrugated cylindrical shells for axial compression, several forms of stability loss can be observed, with the form of the loss depending primarily on the aspect and size of the corrugation; i.e., on the increase in flexural strength and the axial direction of the corrugated shell in comparison with a smooth shell. As a parameter to characterize the increase in flexural strength of corrugated shells

Card 1/5

ACCESSION NR: AT4039435

In the axial direction, the author has chosen the ratio of the moments of inertia of the cross-sections of the corrugated and smooth shells with respect to the axis OX $k = \frac{J_x}{Y_x}$ (See Fig. 1 in the Enclosure). The axis OX passes through the center of gravity of the cross-section arc of the smooth shell, determined by the central angle $\frac{2\pi}{n}$, where n is the number of corrugations over the circumference of the cross-section of the corrugated shell. The tested shells may be conventionally broken down into three groups according to the parameter k: (1) corrugated shells of low flexural strength in the axial direction ($1 < k < 50$); (2) corrugated shells of medium flexural strength in the axial direction ($50 < k < 150$); (3) corrugated shells of high flexural strength in the axial direction ($k > 150$). Depending on the form of the stability loss of longitudinally corrugated shells, the author has indicated the different theories that must be applied to their calculation. In the present paper, the stability of longitudinally corrugated cylindrical shells of high and medium flexural strength in the axial direction, unsupported and supported by ribs, is considered. An analysis is first made of a longitudinally corrugated cylindrical shell under the simultaneous influence of a uniformly distributed axial and transverse load. With n = the number of corrugated waves over the circumference

Card 2/5

ACCESSION NR: AT4039435

of the cross-section, the procedure is to excise a panel determined by the central angle $\frac{2\pi}{n}$.

It is pointed out that normally, in the calculation of the stability of elastic systems, it is assumed that the external load is given with an accuracy equal to the general proportionality factor characterizing the intensity of this load. The stability calculation is reduced to the determination of the least critical value of the generalized load under the prescribed boundary conditions. Next, the author considers the stability of a supported corrugated shell subjected to axial compression. Analogously to the preceding case, a panel which is determined by the central angle $\frac{2\pi}{n}$ is cut out and the problem is treated as one of a thin-walled rod, supported by m ribs under axial compression. The Bubnov-Galerkin variation method is employed to find that the critical value of the load on a longitudinally corrugated cylindrical shell, supported by ribs, under axial compression is given by

$$P^{(gen.)}_{cr.} = n P^{(rod)}_{cr.}$$

where $P^{(rod)}_{cr.}$ is the critical load of a rod cut from the shell and n is the number of corrugation waves along the circumference of the cross-section. It is noted that experimental testing of supported corrugated shells has shown that, once having reached a definite value, $P^{(gen.)}_{cr.}$

Card 3/5

ACCESSION NR: AT4039435

does not vary as the number of supporting ribs is increased; hence, it is not a loss of general shell stability that occurs, but a loss in its carrying capacity. This fact is examined in the article, and the results of the experimental testing of corrugated shells are compared with those of a numerical calculation of such shells according to the theory of rods and the theory of the structurally orthotropic shell (the L. Ye. Andreyevna reduction method — Raschet gofrirovanny*kh membran, kak anizotropny*kh plastin. Inzhenerny*y sbornik, 21, 1955). Orig. art. has: 2 tables, 4 figures and 11 formulas.

ASSOCIATION: none

SUBMITTED: 00   ENCL: 01

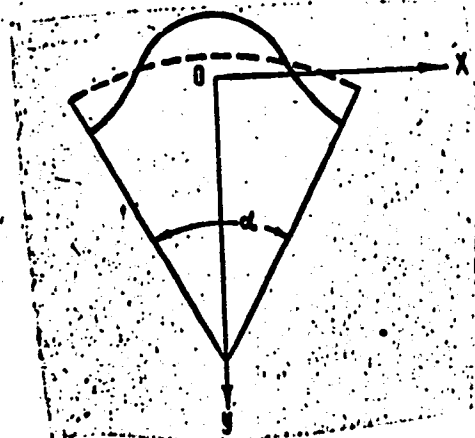SUB CODE: AS, ME   NO REF SOV: 011   OTHER: 000

Card 4/5

Fig. 1.

generation of undamped vibrations is possible are presented. The re-

dynamic stability
a plain shell
ability reg
arm has: 1 fixam a

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Komissarova, L.

investigating the

AN Ur-RSR, Dopovidi, no. 1, 1965, 33-36

... which is equal to the wave of corrugation. ... ... in one, the
forces of interaction between strips are taken into account; in the other, these

subjected to compression by forces uniformly distributed over the faces are derived

Institut mekhaniky AN URSR (Institute of Mechanics)

ENCL:

OTHER:

ATD PRESS: 3175

PETRENKO, M.P. (Kiyev); KOMISSAROVA, G.L. (Kiyev)

Nonlinear vibrations of elastic rods. Prikl.mekh. 1 no.7:117-121 '65.
(MIRA 18:8)

1. Institut mekhaniki AN UkrSSR.

KOMISSAROVA, G.L. (Kiyev); LEONOV, S.A. (Kiyev)

Collision of .viscous elastoplastic rod with an absolutely solid
body. Prikl. mekh. 1 no.8:93-99 '65.   (MIRA 18:9)

1. Institut mekhaniki AN UkrSSR.

L 14433-66   EWT(d)/EWT(m)/EWP(w)/EWP(v)/EWP(k)/EWA(h)/ETC(m)-6   IJP(c)   WW/EM

ACC NR: AP6002644   SOURCE CODE: UR/0021/65/000/011/1438/1443

AUTHOR: Kil'chevs'kyy, M. O. -- Kil'chevskiy, N. A. (Corresponding member AN UkrSSR);
Komisarova, H. L. -- Komissarova, G. L.; Martynenko, V. S.

ORG: Institute of Mechanics, AN UkrSSR (Instytut mekhaniky AN URSR)

TITLE: Nonstationary motion of a viscous liquid in a thin elastic cylindrical tube

SOURCE: AN UkrRSR. Dopovidi, no. 11, 1965, 1438-1443

TOPIC TAGS: hydrodynamics, viscous flow, unsteady flow

ABSTRACT: The authors investigated theoretically the nonstationary motion of viscous
incompressible liquids through deformable cylindrical tubes with the law of motion pre-
scribed at the end cross sections of the tube. Tubes under consideration have large critical
Reynolds numbers and the wall thickness-to-diameter ratio of the tube is small. It is
assumed that at each point under consideration the velocity of the liquid is parallel to the
axis of the tube. The solution is in the form of an approximate expression through special
kinds of polynomials the coefficients of which are found by means of the least square method.
Orig. art. has: 35 formulas.

SUB CODE: 20 / SUBM DATE: 12Feb65 / ORIG REF: 001
Card 1/1

AUTHORS: Komissarova, G.N., and Khodyuk, A.G.   SOV-3-58-8-18/26

TITLE: International Connections of the Higher School (Mezhduna-
                rodnyye svyazi vysshey shkoly). In a Brotherly Family
                (V bratskoy sem'ye)

PERIODICAL: Vestnik vysshey shkoly, 1958, Nr 8, pp 72 - 73 (USSR)

ABSTRACT: Thousands of boys and girls from foreign countries are
                receiving their education in the USSR. A considerable
                number of them are being taught at the Leningrad Techno-
                logical Institute imeni Lensovet. The authors give a re-
                port on the life and work of these students amidst their
                Soviet colleagues. They describe how the foreign students
                are being invited to participate in the scientific and so-
                cial life of the vuz, how they are assisted in learning
                the Russian language, and their interest in Russian clas-
                sical and Soviet literature.

ASSOCIATION: Leningradskiy tekhnologicheskiy institut imeni Lensoveta
                (Leningrad Technological Institute imeni Lensovet)

Card 1/1

S/204/63/003/001/003/013
E075/E436

AUTHORS: Fel'dblyum, V.Sh., Komissarova, G.P., Myasnikova, L.D.,
Kryukov, S.I., Farberov, M.I.

TITLE: The synthesis of isoprene from propylene. 1. Analysis
of aluminium alkyls in the process of dimerization of
propylene

PERIODICAL: Neftekhimiya, v.3, no.1, 1963, 13-19

TEXT: The aim of the work was to investigate the methods for the
analysis of activity and composition of aluminium alkyls.   The
analysis consists of determining the ratio of the "active"
aluminium in AlR_3, where R - an organic radical, to total Al.
The methods used to determine the "active" Al were: 1) the indicator
method of Razuvayev and Grayevskiy, 2) the Ziegler ammoniacal
method,   3) the Tepenitsyna-Farberova oxidation-reduction method,
4) decomposition of AlR_3 with H_2O with the subsequent measurement
of the evolved gas volume.   The first two methods gave correct
values of the activity but are tedious in operation.   The authors
improved the Ziegler method by using di- or trimethylamine in place
of NH_3, which greatly decreased the analysis time.   Examination of

Card 1/2

The synthesis of isoprene ...

S/204/63/003/001/003/013
E075/E436

AlR_3 used several times for the catalysis of the dimerization of propylene showed that the first portion of the higher hydrocarbons (byproducts) forming during the reaction attach themselves to Al, or displace a part of the lower alkyl groups in AlR_3.   Thus AlR_3 used several times as catalyst is a complex mixture of aluminium alkyls, the molecules of which contain propyl and isobutyl groups and at least one $C_9 - C_{12}$ group.   There are 2 figures and 2 tables.

ASSOCIATION: Nauchno-issledovatel'skiy institut monomerov dlya SK
            Yaroslavskiy tekhnologicheskiy institut
            (Scientific Research Institute of Monomers for
            Synthetic Rubber, Yaroslav Technological Institute)

SUBMITTED: June 9, 1962

Card 2/2

KRYUKOV, S.I.; KUT'IN, A.M.; KOMISSAROVA, G.P.; MYASNIKOVA, L.D.; FARBEROV, M.I.

Dimerization of propylene by means of aluminum alkyls. Izv. vys. ucheb. zav.; khim. i khim. tekh. 7 no.5:821-826 '64 (MIRA 18:1)

1. Yaroslavskiy tekhnologicheskiy institut. Kafedra tekhnologii osnovnogo organicheskogo sinteza i sinteticheskogo kauchuka.

MAYOROVA, G.F.; KOMISSAROVA, I.A.; YAKOVLEVA, A.F.; LIVERGANT, A.Ye.

Reactogenicity and effectiveness of inhalation revaccination in children against diphtheria. Zhur. mikrobiol., epid. i immun. 41 no.4:50-55 Ap '64.   (MIRA 18:4)

1. Institut epidemiologii i mikrobiologii imeni Gamalei AMN SSSR i sanitarno-epidemiologicheskaya stantsiya Krasnopresnenskogo rayona Moskvy.

PAPKOV, B.N., kand.med.nauk; KOMISSAROVA, I.M.

Functional state of the cardiovascular system in peptic ulcer of
the stomach and duodenum and the changes in it under the influence
of health resort treatment. Uch.zap.Pyat.gos.nauch.-issl.bal'n.
inst. 3:107-116 '60.   (MIRA 15:10)
            (PEPTIC ULCER)   (CARDIOVASUCLAR SYSTEM)
                 (HEALTH RESORTS, WATERING-PLACES, ETC.)

KOMISSAROVA, I.N.; POKROVSKIY, B.I.

Reaction of Sc_2O_3 with alkaline earth metal oxides.

Zhur.neorg.khim. 10 no.12:2826-2827 D '65.   (MIRA 19:1)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova, kafedra neorganicheskoy khimii.

SHUYKIN, N.I.; KARAKHANOV, R.A.; IBRAKHIMOV, I.I.; KOMISSAROVA, N.L.

Synthesis and transformations of 2-methyl-2-alkyl-2,5-dihydrofurans.
Izv.AN SSSR. Ser.khim. no.1:122-125 '66.
(MIRA 19:11)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR. Submitted August 26, 1963.